



**GROUNDWATER REMEDIATION  
COMPLIANCE DEMONSTRATION  
MONITORING REPORT  
SECOND QUARTER, 2004**

**Conservation Finance Corporation  
c/o Southern California Edison Company  
Visalia Pole Yard Project**



**Krazan** & ASSOCIATES, INC.

GEOTECHNICAL ENGINEERING • ENVIRONMENTAL ENGINEERING  
CONSTRUCTION TESTING & INSPECTION



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COMPLIANCE DEMONSTRATION  
MONITORING REPORT  
SECOND QUARTER, 2004**

**Conservation Finance Corporation  
c/o Southern California Edison Company  
Visalia Pole Yard Project  
Visalia, California**

**Dioxin and Furan  
Analytical Data**

**VOLUME III**

Project No. 014-01011  
October 5, 2004

Prepared for:  
Conservation Finance Corporation  
c/o Southern California Edison  
Attn: Mr. Randy Weidner  
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 **Krazan** & ASSOCIATES, INC.  
SITE DEVELOPMENT ENGINEERS

SEVERN  
TRENT

STL

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May 12, 2004

STL SACRAMENTO PROJECT NUMBER: G4D270225  
PO/CONTRACT: Q1123907

Randy Weidner  
Conservation Financing Corp.  
Southern California Edison  
P.O. Box 800 2244 Walnut Grove Avenue  
Rosemead, CA 91770

Dear Mr. Weidner,

This report contains the analytical results for the samples received under chain of custody by STL Sacramento on April 27, 2004. These samples are associated with your Visalia Poleyard project.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4362.

Sincerely,



Diana Brooks  
Project Manager

CC: Jeff Noel, Krazan and Associates, Inc.

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CASE NARRATIVE

STL SACRAMENTO PROJECT NUMBER G4D270225

There were no anomalies associated with this project.



### STL Sacramento Certifications/Accreditations

Certifying State	Certificate #	Certifying State	Certificate #
Alaska	UST-055	Oregon	CA 200005
Arkansas	NA	South Carolina	87014001
Connecticut	PH-0691	Virginia	00178
Georgia	960	West Virginia	9930C, 334
Hawaii		Wisconsin	199821046891
Louisiana*	01944	NFESC	NA
Michigan		USACE	NA
Nevada	CA 044	USDA Foreign Plant	27-82605
New Jersey	CA 00514	USDA Foreign Soil	S-46613
New York*	11666		

\*NELAP accredited. A more detailed parameter list is available upon request.

### QC Parameter Definitions

**QC Batch:** The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

**Method Blank:** An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

#### Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD):

An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also be used to evaluate the precision of the process.

**Duplicate Sample (DU):** Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

**Surrogates:** Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

**Matrix Spike and Matrix Spike Duplicate (MS/MSD):** An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

**Isotope Dilution:** For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD are only performed for client or QAPP requirements.

**Control Limits:** The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

## Sample Summary

### G4D270225

<u>WO#</u>	<u>Sample #</u>	<u>Client Sample ID</u>	<u>Sampling Date</u>	<u>Received Date</u>
GE1NF	1	VDMW-1	4/26/04 07:00 AM	4/27/04 09:00 AM
GE1NJ	2	VDMW-2	4/26/04 07:30 AM	4/27/04 09:00 AM
GE1NL	3	VDMW-3	4/26/04 08:00 AM	4/27/04 09:00 AM
GE1NN	4	TRIP BLANK	4/26/04	4/27/04 09:00 AM

#### Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight



WATER, 8280A, Dioxins/Furans

**CONSERVATION FINANCING CORP.**  
**Dioxins/Furans, HRGC/LRMS (8280A)**

Client Sample ID: 'DMW-1

Lot-Sample #...: G4D270225 - 001  
 Date Sampled...: 04/26/04  
 Prep Date.....: 04/30/04  
 Prep Batch #...: 4121424

Work Order #...: GE1NF1AA  
 Date Received..: 04/27/04  
 Analysis Date..: 05/05/04  
 Dilution Factor: 1

Matrix....: WATER  
 Instrument: 1DB  
 Units....: ng/L  
 % Moisture:

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	0.46	1.000	0
Total TCDD	ND	0.46		0
1,2,3,7,8-PeCDD	ND	1.2	0.500	0
Total PeCDD	ND	1.7		0
1,2,3,4,7,8-HxCDD	ND	0.47	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.79	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.56	0.100	0
Total HxCDD	ND	0.79		0
1,2,3,4,6,7,8-HpCDD	ND	0.32	0.010	0
Total HpCDD	ND	0.32		0
OCDD	ND	0.66	0.001	0
2,3,7,8-TCDF	ND	0.18	0.100	0
Total TCDF	ND	0.36		0
1,2,3,7,8-PeCDF	ND	0.37	0.050	0
2,3,4,7,8-PeCDF	ND	0.21	0.500	0
Total PeCDF	ND	0.37		0
1,2,3,4,7,8-HxCDF	ND	0.30	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.25	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.45	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.37	0.100	0
Total HxCDF	ND	0.45		0
1,2,3,4,6,7,8-HpCDF	ND	0.55	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.81	0.010	0
Total HpCDF	ND	0.81		0
OCDF	ND	1.3	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	64	25 - 150
13C-2,3,7,8-TCDF	65	25 - 150
13C-1,2,3,6,7,8-HxCDD	68	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	74	25 - 150
13C-OCDD	74	25 - 150
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	88	25 - 150

CONSERVATION FINANCING CORP.  
Dioxins/Furans, HRGC/LRMS (8280A)

Client Sample ID: VDMW-I

Notes:

TEF values are cited in U.S. Environmental Protection Agency. (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC; EPA/625/R-89/016

## CONSERVATION FINANCING CORP.

Dioxins/Furans, HRGC/LRMS (8280A)

Client Sample ID: VDMW-2

Lot-Sample #: G4D270225 - 002  
 Date Sampled.: 04/26/04  
 Prep Date.....: 04/30/04  
 Prep Batch #: 4121424

Work Order #: GE1NJ1AA  
 Date Received.: 04/27/04  
 Analysis Date.: 05/05/04  
 Dilution Factor: 1

Matrix....: WATER  
 Instrument: 1DB  
 Units.....: ng/L  
 % Moisture:

<u>PARAMETER</u>	<u>RESULT</u>	<u>DETECTION LIMIT</u>	<u>TEF FACTOR</u>	<u>TEQ CONCENTRATION</u>
2,3,7,8-TCDD	ND	0.30	1.000	0
Total TCDD	ND	0.30		0
1,2,3,7,8-PeCDD	ND	0.62	0.500	0
Total PeCDD	ND	0.87		0
1,2,3,4,7,8-HxCDD	ND	0.28	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.31	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.25	0.100	0
Total HxCDD	ND	0.31		0
1,2,3,4,6,7,8-HpCDD	ND	0.18	0.010	0
Total HpCDD	ND	0.18		0
OCDD	ND	0.43	0.001	0
2,3,7,8-TCDF	ND	0.15	0.100	0
Total TCDF	ND	0.20		0
1,2,3,7,8-PeCDF	ND	0.17	0.050	0
2,3,4,7,8-PeCDF	ND	0.21	0.500	0
Total PeCDF	ND	0.21		0
1,2,3,4,7,8-HxCDF	ND	0.17	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.15	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.23	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.24	0.100	0
Total HxCDF	ND	0.24		0
1,2,3,4,6,7,8-HpCDF	ND	0.40	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.46	0.010	0
Total HpCDF	ND	0.46		0
OCDF	ND	0.96	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

<u>INTERNAL STANDARDS</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
13C-2,3,7,8-TCDD	74	25 - 150
13C-2,3,7,8-TCDF	73	25 - 150
13C-1,2,3,6,7,8-HxCDD	75	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	81	25 - 150
13C-OCDD	82	25 - 150
<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
37Cl4-2,3,7,8-TCDD	94	25 - 150

**CONSERVATION FINANCING CORP.**

**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: VDMW-2**

**Notes:**

TEF values are cited in U.S Environmental Protection Agency. (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC: EPA 605-R-89-016

## CONSERVATION FINANCING CORP.

Dioxins/Furans, HRGC/LRMS (8280A)

Client Sample ID: VDMW-3

Lot-Sample #...: G4D270225 - 003  
 Date Sampled...: 04/26/04  
 Prep Date.....: 04/30/04  
 Prep Batch #...: 4121424

Work Order #...: GE1NL1AA  
 Date Received..: 04/27/04  
 Analysis Date..: 05/05/04  
 Dilution Factor: 1

Matrix....: WATER  
 Instrument: 1DB  
 Units.....: ng/L  
 % Moisture:

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	0.40	1.000	0
Total TCDD	ND	0.40		0
1,2,3,7,8-PeCDD	ND	1.7	0.500	0
Total PeCDD	ND	2.0		0
1,2,3,4,7,8-HxCDD	ND	0.38	0.100	0
1,2,3,6,7,8-HxCDD	ND	1.1	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.57	0.100	0
Total HxCDD	ND	1.1		0
1,2,3,4,6,7,8-HpCDD	ND	0.46	0.010	0
Total HpCDD	ND	0.46		0
OCDD	ND	1.0	0.001	0
2,3,7,8-TCDF	ND	0.26	0.100	0
Total TCDF	ND	0.39		0
1,2,3,7,8-PeCDF	ND	0.41	0.050	0
2,3,4,7,8-PeCDF	ND	0.37	0.500	0
Total PeCDF	ND	0.41		0
1,2,3,4,7,8-HxCDF	ND	0.43	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.37	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.40	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.45	0.100	0
Total HxCDF	ND	0.45		0
1,2,3,4,6,7,8-HpCDF	ND	0.69	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	1.1	0.010	0
Total HpCDF	ND	1.1		0
OCDF	ND	1.3	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	72	25 - 150
13C-2,3,7,8-TCDF	76	25 - 150
13C-1,2,3,6,7,8-HxCDD	76	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	81	25 - 150
13C-OCDD	85	25 - 150
 <b>SURROGATE</b>	 PERCENT RECOVERY	 RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	99	25 - 150

**CONSERVATION FINANCING CORP.**

**Dioxins/Furans. HRGC/LRMS (8280A)**

**Client Sample ID: VDMW-3**

**Notes:**

TEF values are cited in U.S. Environmental Protection Agency. (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenz-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC: EPA/605/R-89-016

**CONSERVATION FINANCING CORP.**  
**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: TRIP BLANK**

Lot-Sample #...: G4D270225 - 004  
 Date Sampled...: 04/26/04  
 Prep Date.....: 04/30/04  
 Prep Batch #...: 4121424

Work Order #...: GE1NN1AA  
 Date Received.: 04/27/04  
 Analysis Date..: 05/05/04  
 Dilution Factor: 1

Matrix....: WATER  
 Instrument: 1DB  
 Units.....: ng/L  
 % Moisture:

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	0.26	1.000	0
Total TCDD	ND	0.26		0
1,2,3,7,8-PeCDD	ND	0.73	0.500	0
Total PeCDD	ND	1.6		0
1,2,3,4,7,8-HxCDD	ND	0.50	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.95	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.28	0.100	0
Total HxCDD	ND	0.95		0
1,2,3,4,6,7,8-HpCDD	ND	0.29	0.010	0
Total HpCDD	ND	0.29		0
OCDD	ND	0.45	0.001	0
2,3,7,8-TCDF	ND	0.29	0.100	0
Total TCDF	ND	0.86		0
1,2,3,7,8-PeCDF	ND	0.21	0.050	0
2,3,4,7,8-PeCDF	ND	0.30	0.500	0
Total PeCDF	ND	0.31		0
1,2,3,4,7,8-HxCDF	ND	0.66	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.49	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.39	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.43	0.100	0
Total HxCDF	ND	0.66		0
1,2,3,4,6,7,8-HpCDF	ND	0.51	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.73	0.010	0
Total HpCDF	ND	0.73		0
OCDF	ND	1.1	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	74	25 - 150
13C-2,3,7,8-TCDF	74	25 - 150
13C-1,2,3,6,7,8-HxCDD	79	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	81	25 - 150
13C-OCDD	75	25 - 150
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	97	25 - 150

CONSERVATION FINANCING CORP.

Dioxins/Furans, HRGC/LRMS (8280A)

Client Sample ID: TRIP BLANK

Notes:

TEF values are cited in U.S. Environmental Protection Agency, (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenz-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment Forum, Washington, DC; EPA/625.3-89-016

## QC DATA ASSOCIATION SUMMARY

G4D270225

### Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	WATER	SW846 8280A		4121424	
002	WATER	SW846 8280A		4121424	
003	WATER	SW846 8280A		4121424	
004	WATER	SW846 8280A		4121424	

**METHOD BLANK REPORT**

**Trace Level Organic Compounds**

Client Lot #....: G4D270225      Work Order #....: GFCKR1AA      Matrix.....: WATER  
 MB Lot-Sample #: G4D300000-424  
 Analysis Date...: 05/05/04      Prep Date.....: 04/30/04  
 Dilution Factor: 1      Prep Batch #: 4121424

PARAMETER	RESULT	DETECTION		METHOD
		LIMIT	UNITS	
2,3,7,8-TCDD	ND	0.25	ng/L	SW846 8280A
Total TCDD	ND	0.25	ng/L	SW846 8280A
1,2,3,7,8-PeCDD	ND	1.4	ng/L	SW846 8280A
Total PeCDD	ND	2.4	ng/L	SW846 8280A
1,2,3,4,7,8-HxCDD	ND	0.31	ng/L	SW846 8280A
1,2,3,6,7,8-HxCDD	ND	0.53	ng/L	SW846 8280A
1,2,3,7,8,9-HxCDD	ND	0.38	ng/L	SW846 8280A
Total HxCDD	ND	0.53	ng/L	SW846 8280A
1,2,3,4,6,7,8-HpCDD	ND	0.40	ng/L	SW846 8280A
Total HpCDD	ND	0.40	ng/L	SW846 8280A
OCDD	ND	0.66	ng/L	SW846 8280A
2,3,7,8-TCDF	ND	0.21	ng/L	SW846 8280A
Total TCDF	ND	0.37	ng/L	SW846 8280A
1,2,3,7,8-PeCDF	ND	0.25	ng/L	SW846 8280A
2,3,4,7,8-PeCDF	ND	0.58	ng/L	SW846 8280A
Total PeCDF	ND	0.58	ng/L	SW846 8280A
1,2,3,4,7,8-HxCDF	ND	0.31	ng/L	SW846 8280A
1,2,3,6,7,8-HxCDF	ND	0.29	ng/L	SW846 8280A
2,3,4,6,7,8-HxCDF	ND	0.25	ng/L	SW846 8280A
1,2,3,7,8,9-HxCDF	ND	0.28	ng/L	SW846 8280A
Total HxCDF	ND	0.31	ng/L	SW846 8280A
1,2,3,4,6,7,8-HpCDF	ND	0.66	ng/L	SW846 8280A
1,2,3,4,7,8,9-HpCDF	ND	0.77	ng/L	SW846 8280A
Total HpCDF	ND	0.77	ng/L	SW846 8280A
OCDF	ND	1.1	ng/L	SW846 8280A

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY	
		LIMITS	
13C-2,3,7,8-TCDD	70	(25 - 150)	
13C-2,3,7,8-TCDF	70	(25 - 150)	
13C-1,2,3,6,7,8-HxCDD	69	(25 - 150)	
13C-1,2,3,4,6,7,8-HpCDF	73	(25 - 150)	
13C-OCDD	72	(25 - 150)	

SURROGATE	PERCENT RECOVERY	RECOVERY	
		LIMITS	
37Cl-2,3,7,8-TCDD	102	(25 - 150)	

**NOTE(S):**

Calculations are performed before rounding to avoid round-off errors in calculated results.

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## Trace Level Organic Compounds

Client Lot #....: G4D270225      Work Order #....: GFCKR1AC      Matrix.....: WATER  
**LCS Lot-Sample#:** G4D300000-424  
 Prep Date.....: 04/30/04      Analysis Date...: 05/05/04  
 Prep Batch #....: 4121424  
 Dilution Factor: 1

<u>PARAMETER</u>	PERCENT RECOVERY	RECOVERY LIMITS	METHOD
2,3,7,8-TCDD	97	(67 - 127)	SW846 8280A
1,2,3,7,8-PeCDD	107	(66 - 140)	SW846 8280A
1,2,3,6,7,8-HxCDD	115	(73 - 126)	SW846 8280A
1,2,3,4,6,7,8-HpCDD	100	(70 - 129)	SW846 8280A
OCDD	112	(58 - 118)	SW846 8280A
2,3,7,8-TCDF	120	(21 - 129)	SW846 8280A
1,2,3,7,8-PeCDF	109	(70 - 144)	SW846 8280A
1,2,3,6,7,8-HxCDF	98	(67 - 125)	SW846 8280A
1,2,3,4,6,7,8-HpCDF	106	(68 - 123)	SW846 8280A
OCDF	105	(59 - 119)	SW846 8280A

<u>INTERNAL STANDARD</u>	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	61	(25 - 150)
13C-2,3,7,8-TCDF	60	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	64	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	63	(25 - 150)
13C-OCDD	64	(25 - 150)

<u>SURROGATE</u>	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	97	(25 - 150)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE DATA REPORT

## Trace Level Organic Compounds

Client Lot #...: G4D270225      Work Order #...: GFCK1AC      Matrix.....: WATER  
 LCS Lot-Sample#: G4D300000-424  
 Prep Date.....: 04/30/04      Analysis Date..: 05/05/04  
 Prep Batch #...: 4121424  
 Dilution Factor: 1

<u>PARAMETER</u>	SPIKE <u>AMOUNT</u>	MEASURED <u>AMOUNT</u>	UNITS	PERCENT <u>RECOVERY</u>	METHOD
2,3,7,8-TCDD	25.0	24.3	ng/L	97	SW846 8280A
1,2,3,7,8-PeCDD	62.5	66.8	ng/L	107	SW846 8280A
1,2,3,6,7,8-HxCDD	62.5	71.8	ng/L	115	SW846 8280A
1,2,3,4,6,7,8-HpCDD	62.5	62.8	ng/L	100	SW846 8280A
OCDD	125	140	ng/L	112	SW846 8280A
2,3,7,8-TCDF	25.0	30.0	ng/L	120	SW846 8280A
1,2,3,7,8-PeCDF	62.5	67.9	ng/L	109	SW846 8280A
1,2,3,6,7,8-HxCDF	62.5	61.5	ng/L	98	SW846 8280A
1,2,3,4,6,7,8-HpCDF	62.5	66.2	ng/L	106	SW846 8280A
OCDF	125	132	ng/L	105	SW846 8280A

<u>INTERNAL STANDARD</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
13C-2,3,7,8-TCDD	61	(25 - 150)
13C-2,3,7,8-TCDF	60	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	64	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	63	(25 - 150)
13C-OCDD	64	(25 - 150)

<u>SURROGATE</u>	PERCENT <u>RECOVERY</u>	RECOVERY <u>LIMITS</u>
37Cl4-2,3,7,8-TCDD	97	(25 - 150)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

SEVERN  
TRENT

STL

STL Sacramento  
880 Riverside Parkway  
West Sacramento, CA 95605

Tel: 916 373 5600 Fax: 916 372 1059  
[www.stl-inc.com](http://www.stl-inc.com)

July 19, 2004

STL SACRAMENTO PROJECT NUMBER: G4G080266  
PO/CONTRACT: Q1123907

Randy Weidner  
Conservation Financing Corp.  
Southern California Edison  
P.O. Box 800 2244 Walnut Grove Avenue  
Rosemead, CA 91770

Dear Mr. Weidner,

This report contains the analytical results for the samples received under chain of custody by STL Sacramento on July 8, 2004. These samples are associated with your Visalia Poleyard project.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4362.

Sincerely,

  
Diana Brooks  
Project Manager

Cc: Jeff Noels, Krazan and Associates, Inc.

## **TABLE OF CONTENTS**

### **STL SACRAMENTO PROJECT NUMBER G4G080266**

Case Narrative

STL Sacramento Quality Assurance Program

Sample Description Information

Chain of Custody Documentation

WATER, 8280A, Dioxins/Furans

Samples: 1, 2, 3, 4, 5, 6, 7, 8

    Sample Data Sheets

    Method Blank Reports

    Laboratory QC Reports

**CASE NARRATIVE**

**STL SACRAMENTO PROJECT NUMBER G4G080266**

There were no anomalies associated with this project.

SEVERN  
TRENT

STL



### STL Sacramento Certifications/Accreditations

Certifying State	Certificate #	Certifying State	Certificate #
Alaska	UST-055	Oregon	CA 200005
Arizona	AZ0616	Pennsylvania	68-1272
Arkansas	NA	South Carolina	87014001
California*	01119CA	Utah*	QUAN1
Connecticut	PH-0691	Virginia	00178
Florida*	E87570	Washington	C087
Georgia	960	West Virginia	9930C, 334
Hawaii	NA	Wisconsin	998204680
Louisiana*	01944	NFESC	NA
Michigan	9947	USACE	NA
Nevada	CA 044	USACE	NA
New Jersey*	CA005	USDA Foreign Plant	37-82605
New York*	11666	USDA Foreign Soil	S-46613

\*NELAP accredited. A more detailed parameter list is available upon request.

### QC Parameter Definitions

**QC Batch:** The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

**Method Blank:** An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

**Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD):**

An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also be used to evaluate the precision of the process.

**Duplicate Sample (DU):** Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

**Surrogates:** Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

**Matrix Spike and Matrix Spike Duplicate (MS/MSD):** An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

**Isotope Dilution:** For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD are only performed for client or QAPP requirements.

**Control Limits:** The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

## Sample Summary

### G4G080266

<u>WO#</u>	<u>Sample #</u>	<u>Client Sample ID</u>	<u>Sampling Date</u>	<u>Received Date</u>
GKN3D 1		S-4I	7/7/04 09:00 AM	7/8/04 09:20 AM
GKN3E 2		S-7I	7/7/04 09:45 AM	7/8/04 09:20 AM
GKN3G 3		S-9D	7/7/04 10:30 AM	7/8/04 09:20 AM
GKN3K 4		S-11I	7/7/04 11:15 AM	7/8/04 09:20 AM
GKN3L 5		VDMW-1	7/7/04 12:00 PM	7/8/04 09:20 AM
GKN3M 6		VDMW-2	7/7/04 12:45 PM	7/8/04 09:20 AM
GKN3N 7		VDMW-3	7/7/04 01:30 PM	7/8/04 09:20 AM
GKN3Q 8		VDMW-4	7/7/04 02:15 PM	7/8/04 09:20 AM

#### Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight

The logo for Krazan features a circular icon on the left containing a stylized globe with horizontal lines representing latitude. To the right of the icon, the word "Krazan" is written in a bold, black, sans-serif font. The letter "K" has a vertical bar extending upwards from its top, and the letter "a" has a vertical bar extending downwards from its bottom.

**CHAIN-OF-CUSTODY RECORD**

DATE: 7-7-04

PAGE / OF /

KRAZAN & ASSOCIATES, INC.  
215 WEST DAKOTA AVENUE  
CLOVIS, CA 93612  
(559) 348-2200 VOICE  
(559) 348-2201 FAX

Project No.: 01401001

Sampler Name  
(Printed): Michael L. Mauzy

*Lab Sample*

ID#	Sample No.	Sampled Date	Sampled Time	Sample Description
-----	------------	--------------	--------------	--------------------

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Sample Matrix	
W=Water S=Soil A=Air	
J=Other	
Sample Type	
G=Gel C=Composite	
D=Discard	
Sample Preserved?	
Y=Yes N=No	
Number of Individuals	

Signature	Printed Name	Date	Time	Company Name	17	Total Number of Containers Submitted to Laboratory
Relinquished by: <i>Mitchell L Mawry</i>	<i>M. Charles Mawry</i>	7-7-04	1600 am pm	<i>Krazon</i>		Turn Around Time (Circle Choice)
Received by:			am pm			
Relinquished by:			am pm			
Received by:			am pm			
Relinquished by:			am pm			
Received for Laboratory by: <i>A CONCERN</i>		7/10/04	1230 PM	<i>CONCERN</i>		
						As Contracted

# WATER, 8280A, Dioxins/Furans

**CONSERVATION FINANCING CORP.**  
**Dioxins/Furans, HRGC/LRMS (8280A)**

Client Sample ID: S-4I

Lot-Sample #: G4G080266 - 001  
 Date Sampled...: 07/07/04  
 Prep Date.....: 07/12/04  
 Prep Batch #...: 4194625

Work Order #: GKN3D1AA  
 Date Received.: 07/08/04  
 Analysis Date.: 07/14/04  
 Dilution Factor: 1

Matrix....: WATER  
 Instrument: 1DB  
 Units.....: ng/L  
 % Moisture:

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	0.032	1.000	0
Total TCDD	ND	0.032		0
1,2,3,7,8-PeCDD	ND	0.068	0.500	0
Total PeCDD	ND	0.068		0
1,2,3,4,7,8-HxCDD	ND	0.075	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.077	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.053	0.100	0
Total HxCDD	ND	0.077		0
1,2,3,4,6,7,8-HpCDD	ND	0.074	0.010	0
Total HpCDD	ND	0.074		0
OCDD	ND	0.12	0.001	0
2,3,7,8-TCDF	ND	0.019	0.100	0
Total TCDF	ND	0.019		0
1,2,3,7,8-PeCDF	ND	0.030	0.050	0
2,3,4,7,8-PeCDF	ND	0.028	0.500	0
Total PeCDF	ND	0.031		0
1,2,3,4,7,8-HxCDF	ND	0.045	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.035	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.063	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.044	0.100	0
Total HxCDF	ND	0.063		0
1,2,3,4,6,7,8-HpCDF	ND	0.050	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.039	0.010	0
Total HpCDF	ND	0.058		0
OCDF	ND	0.091	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	99	25 - 150
13C-2,3,7,8-TCDF	103	25 - 150
13C-1,2,3,6,7,8-HxCDD	96	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	123	25 - 150
13C-OCDD	107	25 - 150
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	107	25 - 150

**CONSERVATION FINANCING CORP.**

**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: S-4I**

**Notes:**

TEF values are cited in U.S. Environmental Protection Agency, (1989) interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC; EPA/675/R-89/016

## CONSERVATION FINANCING CORP.

Dioxins/Furans, HRGC/LRMS (8280A)

## Client Sample ID: S-7I

Lot-Sample #...: G4G080266 - 002  
 Date Sampled...: 07/07/04  
 Prep Date.....: 07/12/04  
 Prep Batch #...: 4194625

Work Order #...: GKN3E1AA  
 Date Received...: 07/08/04  
 Analysis Date...: 07/14/04  
 Dilution Factor: 1

Matrix....: WATER  
 Instrument: 1DB  
 Units....: ng/L  
 % Moisture:

<u>PARAMETER</u>	<u>RESULT</u>	<u>DETECTION LIMIT</u>	<u>TEF FACTOR</u>	<u>TEQ CONCENTRATION</u>
2,3,7,8-TCDD	ND	0.040	1.000	0
Total TCDD	ND	0.040		0
1,2,3,7,8-PeCDD	ND	0.092	0.500	0
Total PeCDD	ND	0.092		0
1,2,3,4,7,8-HxCDD	ND	0.028	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.076	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.039	0.100	0
Total HxCDD	ND	0.076		0
1,2,3,4,6,7,8-HpCDD	ND	0.047	0.010	0
Total HpCDD	ND	0.047		0
OCDD	ND	0.20	0.001	0
2,3,7,8-TCDF	ND	0.016	0.100	0
Total TCDF	ND	0.016		0
1,2,3,7,8-PeCDF	ND	0.046	0.050	0
2,3,4,7,8-PeCDF	ND	0.017	0.500	0
Total PeCDF	ND	0.062		0
1,2,3,4,7,8-HxCDF	ND	0.020	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.016	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.046	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.050	0.100	0
Total HxCDF	ND	0.050		0
1,2,3,4,6,7,8-HpCDF	ND	0.062	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.035	0.010	0
Total HpCDF	ND	0.067		0
OCDF	ND	0.45	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

<u>INTERNAL STANDARDS</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
13C-2,3,7,8-TCDD	90	25 - 150
13C-2,3,7,8-TCDF	95	25 - 150
13C-1,2,3,6,7,8-HxCDD	86	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	115	25 - 150
13C-OCDD	97	25 - 150

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
37Cl4-2,3,7,8-TCDD	95	25 - 150

**CONSERVATION FINANCING CORP.**  
**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: S-7I**

**Notes:**

TEF values are cited in U.S. Environmental Protection Agency, (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment Forum, Washington, DC; EPA/605/R-90/016

## CONSERVATION FINANCING CORP.

Dioxins/Furans, HRGC/LRMS (8280A)

## Client Sample ID: S-9D

Lot-Sample #...:	G4G080266 - 003	Work Order #...:	GKN3G1AA	Matrix....:	WATER
Date Sampled...:	07/07/04	Date Received..:	07/08/04	Instrument:	IDB
Prep Date.....:	07/12/04	Analysis Date.:	07/14/04	Units.....:	ng/L
Prep Batch #...:	4194625	Dilution Factor:	1	% Moisture:	

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	0.033	1.000	0
Total TCDD	ND	0.033		0
1,2,3,7,8-PeCDD	ND	0.057	0.500	0
Total PeCDD	ND	0.057		0
1,2,3,4,7,8-HxCDD	ND	0.070	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.050	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.056	0.100	0
Total HxCDD	ND	0.070		0
1,2,3,4,6,7,8-HpCDD	ND	0.54	0.010	0
Total HpCDD	ND	0.74		0
OCDD	ND	2.2	0.001	0
2,3,7,8-TCDF	ND	0.020	0.100	0
Total TCDF	ND	0.020		0
1,2,3,7,8-PeCDF	ND	0.039	0.050	0
2,3,4,7,8-PeCDF	ND	0.031	0.500	0
Total PeCDF	ND	0.073		0
1,2,3,4,7,8-HxCDF	ND	0.025	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.020	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.063	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.062	0.100	0
Total HxCDF	ND	0.086		0
1,2,3,4,6,7,8-HpCDF	ND	0.066	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.051	0.010	0
Total HpCDF	ND	0.075		0
OCDF	ND	0.12	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	89	25 - 150
13C-2,3,7,8-TCDF	92	25 - 150
13C-1,2,3,6,7,8-HxCDD	89	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	111	25 - 150
13C-OCDD	105	25 - 150

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	96	25 - 150

**CONSERVATION FINANCING CORP.  
Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: S-9D**

**Notes:**

TEF values are cited in U.S. Environmental Protection Agency, (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC; FPA/625/R-89/016

## CONSERVATION FINANCING CORP.

Dioxins/Furans, HRGC/LRMS (8280A)

Client Sample ID: S-11I

Lot-Sample #...:	G4G080266 - 004	Work Order #...:	GKN3K1AA	Matrix....:	WATER
Date Sampled...:	07/07/04	Date Received...:	07/08/04	Instrument:	1DB
Prep Date.....:	07/12/04	Analysis Date...:	07/14/04	Units.....:	ng/L
Prep Batch #...:	4194625	Dilution Factor:	1	% Moisture:	

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	0.044	1.000	0
Total TCDD	ND	0.044		0
1,2,3,7,8-PeCDD	ND	0.077	0.500	0
Total PeCDD	ND	0.077		0
1,2,3,4,7,8-HxCDD	ND	0.023	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.074	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.052	0.100	0
Total HxCDD	ND	0.074		0
1,2,3,4,6,7,8-HpCDD	ND	0.088	0.010	0
Total HpCDD	ND	0.088		0
OCDD	ND	0.18	0.001	0
2,3,7,8-TCDF	ND	0.028	0.100	0
Total TCDF	ND	0.028		0
1,2,3,7,8-PeCDF	ND	0.030	0.050	0
2,3,4,7,8-PeCDF	ND	0.024	0.500	0
Total PeCDF	ND	0.076		0
1,2,3,4,7,8-HxCDF	ND	0.035	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.028	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.046	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.077	0.100	0
Total HxCDF	ND	0.077		0
1,2,3,4,6,7,8-HpCDF	ND	0.044	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.065	0.010	0
Total HpCDF	ND	0.065		0
OCDF	ND	0.13	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	93	25 - 150
13C-2,3,7,8-TCDF	95	25 - 150
13C-1,2,3,6,7,8-HxCDD	92	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	114	25 - 150
13C-OCDD	102	25 - 150

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	101	25 - 150

**CONSERVATION FINANCING CORP.**

**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: S-111**

**Notes:**

TEF values are cited in U.S. Environmental Protection Agency, (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment Forum, Washington, DC; EPA/625/R-89/016

## CONSERVATION FINANCING CORP.

Dioxins/Furans, HRGC/LRMS (8280A)

Client Sample ID: VDMW-1

Lot-Sample #...:	G4G080266 - 005	Work Order #...:	GKN3L1AA	Matrix....:	WATER
Date Sampled...:	07/07/04	Date Received...:	07/08/04	Instrument:	1DB
Prep Date.....:	07/12/04	Analysis Date..:	07/14/04	Units....:	ng/L
Prep Batch #...:	4194625	Dilution Factor:	1	% Moisture:	

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	0.033	1.000	0
Total TCDD	ND	0.033		0
1,2,3,7,8-PeCDD	ND	0.089	0.500	0
Total PeCDD	ND	0.089		0
1,2,3,4,7,8-HxCDD	ND	0.027	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.040	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.034	0.100	0
Total HxCDD	ND	0.040		0
1,2,3,4,6,7,8-HpCDD	ND	0.053	0.010	0
Total HpCDD	ND	0.053		0
OCDD	ND	0.12	0.001	0
2,3,7,8-TCDF	ND	0.022	0.100	0
Total TCDF	ND	0.022		0
1,2,3,7,8-PeCDF	ND	0.029	0.050	0
2,3,4,7,8-PeCDF	ND	0.027	0.500	0
Total PeCDF	ND	0.032		0
1,2,3,4,7,8-HxCDF	ND	0.026	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.021	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.046	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.029	0.100	0
Total HxCDF	ND	0.071		0
1,2,3,4,6,7,8-HpCDF	ND	0.041	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.042	0.010	0
Total HpCDF	ND	0.15		0
OCDF	ND	0.33	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	86	25 - 150
13C-2,3,7,8-TCDF	89	25 - 150
13C-1,2,3,6,7,8-HxCDD	90	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	112	25 - 150
13C-OCDD	101	25 - 150

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	93	25 - 150

**CONSERVATION FINANCING CORP.**  
**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: VDMW-1**

**Notes:**

TEF values are cited in U.S. Environmental Protection Agency, (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment Forum, Washington, DC; EPA/600/R-89/016

**CONSERVATION FINANCING CORP.**  
**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: VDMW-2**

**Lot-Sample #...:** G4G080266 - 006  
**Date Sampled...:** 07/07/04  
**Prep Date.....:** 07/12/04  
**Prep Batch #...:** 4194625

**Work Order #...:** GKN3M1AA  
**Date Received..:** 07/08/04  
**Analysis Date..:** 07/14/04  
**Dilution Factor:** 1

**Matrix....:** WATER  
**Instrument:** 1DB  
**Units.....:** ng/L  
**% Moisture:**

<b>PARAMETER</b>	<b>RESULT</b>	<b>DETECTION LIMIT</b>	<b>TEF FACTOR</b>	<b>TEQ CONCENTRATION</b>
2,3,7,8-TCDD	ND	0.049	1.000	0
Total TCDD	ND	0.049		0
1,2,3,7,8-PeCDD	ND	0.091	0.500	0
Total PeCDD	ND	0.091		0
1,2,3,4,7,8-HxCDD	ND	0.048	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.060	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.057	0.100	0
Total HxCDD	ND	0.060		0
1,2,3,4,6,7,8-HpCDD	ND	0.060	0.010	0
Total HpCDD	ND	0.060		0
OCDD	ND	0.12	0.001	0
2,3,7,8-TCDF	ND	0.017	0.100	0
Total TCDF	ND	0.017		0
1,2,3,7,8-PeCDF	ND	0.030	0.050	0
2,3,4,7,8-PeCDF	ND	0.027	0.500	0
Total PeCDF	ND	0.079		0
1,2,3,4,7,8-HxCDF	ND	0.023	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.018	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.038	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.075	0.100	0
Total HxCDF	ND	0.095		0
1,2,3,4,6,7,8-HpCDF	ND	0.052	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.040	0.010	0
Total HpCDF	ND	0.058		0
OCDF	ND	0.091	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

<b>INTERNAL STANDARDS</b>	<b>PERCENT RECOVERY</b>	<b>RECOVERY LIMITS</b>
13C-2,3,7,8-TCDD	97	25 - 150
13C-2,3,7,8-TCDF	99	25 - 150
13C-1,2,3,6,7,8-HxCDD	95	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	120	25 - 150
13C-OCDD	110	25 - 150

<b>SURROGATE</b>	<b>PERCENT RECOVERY</b>	<b>RECOVERY LIMITS</b>
37Cl4-2,3,7,8-TCDD	102	25 - 150

**CONSERVATION FINANCING CORP.**  
**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: VDMW-2**

**Notes:**

TEF values are cited in U.S. Environmental Protection Agency, (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC: EPA/600/R-90/01A

## CONSERVATION FINANCING CORP.

Dioxins/Furans, HRGC/LRMS (8280A)

## Client Sample ID: VDMW-3

Lot-Sample #...: G4G080266 - 007  
 Date Sampled...: 07/07/04  
 Prep Date.....: 07/12/04  
 Prep Batch #...: 4194625

Work Order #...: GKN3N1AA  
 Date Received..: 07/08/04  
 Analysis Date..: 07/14/04  
 Dilution Factor: 1  
 Matrix....: WATER  
 Instrument: 1DB  
 Units....: ng/L  
 % Moisture:

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	0.030	1.000	0
Total TCDD	ND	0.030		0
1,2,3,7,8-PeCDD	ND	0.072	0.500	0
Total PeCDD	ND	0.072		0
1,2,3,4,7,8-HxCDD	ND	0.070	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.050	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.047	0.100	0
Total HxCDD	ND	0.070		0
1,2,3,4,6,7,8-HpCDD	ND	0.22	0.010	0
Total HpCDD	ND	0.22		0
OCDD	ND	0.37	0.001	0
2,3,7,8-TCDF	ND	0.020	0.100	0
Total TCDF	ND	0.020		0
1,2,3,7,8-PeCDF	ND	0.033	0.050	0
2,3,4,7,8-PeCDF	ND	0.029	0.500	0
Total PeCDF	ND	0.057		0
1,2,3,4,7,8-HxCDF	ND	0.032	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.027	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.028	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.055	0.100	0
Total HxCDF	ND	0.11		0
1,2,3,4,6,7,8-HpCDF	ND	0.053	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.049	0.010	0
Total HpCDF	ND	0.22		0
OCDF	ND	0.12	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	87	25 - 150
13C-2,3,7,8-TCDF	92	25 - 150
13C-1,2,3,6,7,8-HxCDD	85	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	105	25 - 150
13C-OCDD	92	25 - 150

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	110	25 - 150

**CONSERVATION FINANCING CORP.**

**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: VDMW-3**

**Notes:**

TEF values are cited in U.S. Environmental Protection Agency, (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC; FPA/625/2-89/016

**CONSERVATION FINANCING CORP.**  
**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: VDMW-4**

Lot-Sample #...: G4G080266 - 008  
 Date Sampled...: 07/07/04  
 Prep Date.....: 07/12/04  
 Prep Batch #...: 4194625

Work Order #...: GKN3Q1AA  
 Date Received..: 07/08/04  
 Analysis Date.: 07/14/04  
 Dilution Factor: 1

Matrix....: WATER  
 Instrument: 1DB  
 Units.....: ng/L  
 % Moisture:

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	0.046	1.000	0
Total TCDD	ND	0.046		0
1,2,3,7,8-PeCDD	ND	0.061	0.500	0
Total PeCDD	ND	0.061		0
1,2,3,4,7,8-HxCDD	ND	0.039	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.16	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.11	0.100	0
Total HxCDD	ND	0.16		0
1,2,3,4,6,7,8-HpCDD	ND	0.17	0.010	0
Total HpCDD	ND	0.17		0
OCDD	ND	0.26	0.001	0
2,3,7,8-TCDF	ND	0.029	0.100	0
Total TCDF	ND	0.029		0
1,2,3,7,8-PeCDF	ND	0.072	0.050	0
2,3,4,7,8-PeCDF	ND	0.077	0.500	0
Total PeCDF	ND	0.090		0
1,2,3,4,7,8-HxCDF	ND	0.12	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.097	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.077	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.11	0.100	0
Total HxCDF	ND	0.13		0
1,2,3,4,6,7,8-HpCDF	ND	0.045	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.12	0.010	0
Total HpCDF	ND	0.12		0
OCDF	ND	0.069	0.001	0
<b>Total TEQ Concentration</b>				0

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	89	25 - 150
13C-2,3,7,8-TCDF	93	25 - 150
13C-1,2,3,6,7,8-HxCDD	85	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	108	25 - 150
13C-OCDD	96	25 - 150

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	98	25 - 150

**CONSERVATION FINANCING CORP.**

**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: VDMW-4**

**Notes:**

TEF values are cited in U.S. Environmental Protection Agency, (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC; EPA/605/R-89/016

## QC DATA ASSOCIATION SUMMARY

G4G080266

### Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	WATER	SW846 8280A		4194625	
002	WATER	SW846 8280A		4194625	
003	WATER	SW846 8280A		4194625	
004	WATER	SW846 8280A		4194625	
005	WATER	SW846 8280A		4194625	
006	WATER	SW846 8280A		4194625	
007	WATER	SW846 8280A		4194625	
008	WATER	SW846 8280A		4194625	

**METHOD BLANK REPORT**

**Trace Level Organic Compounds**

**Client Lot #....:** G4G080266  
**MB Lot-Sample #:** G4G120000-625

**Work Order #....:** GKXD91AA  
**Prep Date.....:** 07/12/04

**Matrix.....:** WATER

**Analysis Date...:** 07/14/04  
**Dilution Factor:** 1

**Prep Batch #....:** 4194625

<u>PARAMETER</u>	<u>RESULT</u>	DETECTION		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
2,3,7,8-TCDD	ND	0.037	ng/L	SW846 8280A
Total TCDD	ND	0.037	ng/L	SW846 8280A
1,2,3,7,8-PeCDD	ND	0.068	ng/L	SW846 8280A
Total PeCDD	ND	0.068	ng/L	SW846 8280A
1,2,3,4,7,8-HxCDD	ND	0.069	ng/L	SW846 8280A
1,2,3,6,7,8-HxCDD	ND	0.071	ng/L	SW846 8280A
1,2,3,7,8,9-HxCDD	ND	0.051	ng/L	SW846 8280A
Total HxCDD	ND	0.071	ng/L	SW846 8280A
1,2,3,4,6,7,8-HpCDD	ND	0.060	ng/L	SW846 8280A
Total HpCDD	ND	0.060	ng/L	SW846 8280A
OCDD	ND	0.16	ng/L	SW846 8280A
2,3,7,8-TCDF	ND	0.021	ng/L	SW846 8280A
Total TCDF	ND	0.021	ng/L	SW846 8280A
1,2,3,7,8-PeCDF	ND	0.025	ng/L	SW846 8280A
2,3,4,7,8-PeCDF	ND	0.028	ng/L	SW846 8280A
Total PeCDF	ND	0.089	ng/L	SW846 8280A
1,2,3,4,7,8-HxCDF	ND	0.029	ng/L	SW846 8280A
1,2,3,6,7,8-HxCDF	ND	0.025	ng/L	SW846 8280A
2,3,4,6,7,8-HxCDF	ND	0.049	ng/L	SW846 8280A
1,2,3,7,8,9-HxCDF	ND	0.075	ng/L	SW846 8280A
Total HxCDF	ND	0.075	ng/L	SW846 8280A
1,2,3,4,6,7,8-HpCDF	ND	0.039	ng/L	SW846 8280A
1,2,3,4,7,8,9-HpCDF	ND	0.069	ng/L	SW846 8280A
Total HpCDF	ND	0.069	ng/L	SW846 8280A
OCDF	ND	0.15	ng/L	SW846 8280A

<u>INTERNAL STANDARDS</u>	<u>PERCENT</u>	RECOVERY	
		<u>RECOVERY</u>	<u>LIMITS</u>
13C-2,3,7,8-TCDD	86	(25 - 150)	
13C-2,3,7,8-TCDF	89	(25 - 150)	
13C-1,2,3,6,7,8-HxCDD	81	(25 - 150)	
13C-1,2,3,4,6,7,8-HpCDF	108	(25 - 150)	
13C-OCDD	87	(25 - 150)	

<u>SURROGATE</u>	<u>PERCENT</u>	RECOVERY	
		<u>RECOVERY</u>	<u>LIMITS</u>
37Cl-2,3,7,8-TCDD	100	(25 - 150)	

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## Trace Level Organic Compounds

Client Lot #....: G4G080266      Work Order #....: GKXD91AC      Matrix.....: WATER  
 LCS Lot-Sample#: G4G120000-625  
 Prep Date.....: 07/12/04      Analysis Date...: 07/14/04  
 Prep Batch #....: 4194625  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
2,3,7,8-TCDD	104	(67 - 127)	SW846 8280A
1,2,3,7,8-PeCDD	106	(66 - 140)	SW846 8280A
1,2,3,6,7,8-HxCDD	99	(73 - 126)	SW846 8280A
1,2,3,4,6,7,8-HpCDD	102	(70 - 129)	SW846 8280A
OCDD	92	(58 - 118)	SW846 8280A
2,3,7,8-TCDF	98	(21 - 129)	SW846 8280A
1,2,3,7,8-PeCDF	106	(70 - 144)	SW846 8280A
1,2,3,6,7,8-HxCDF	92	(67 - 125)	SW846 8280A
1,2,3,4,6,7,8-HpCDF	99	(68 - 123)	SW846 8280A
OCDF	89	(59 - 119)	SW846 8280A

<u>INTERNAL STANDARD</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
13C-2,3,7,8-TCDD	94	(25 - 150)
13C-2,3,7,8-TCDF	98	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	96	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	106	(25 - 150)
13C-OCDD	99	(25 - 150)

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
37Cl4-2,3,7,8-TCDD	108	(25 - 150)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE DATA REPORT

## Trace Level Organic Compounds

Client Lot #....: G4G080266      Work Order #....: GKXD91AC      Matrix.....: WATER  
 LCS Lot-Sample#: G4G120000-625  
 Prep Date.....: 07/12/04      Analysis Date..: 07/14/04  
 Prep Batch #....: 4194625  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>UNITS</u>	<u>PERCENT</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>		<u>RECOVERY</u>	
2,3,7,8-TCDD	25.0	26.0	ng/L	104	SW846 8280A
1,2,3,7,8-PeCDD	62.5	66.5	ng/L	106	SW846 8280A
1,2,3,6,7,8-HxCDD	62.5	62.0	ng/L	99	SW846 8280A
1,2,3,4,6,7,8-HpCDD	62.5	64.0	ng/L	102	SW846 8280A
OCDD	125	115	ng/L	92	SW846 8280A
2,3,7,8-TCDF	25.0	24.4	ng/L	98	SW846 8280A
1,2,3,7,8-PeCDF	62.5	66.3	ng/L	106	SW846 8280A
1,2,3,6,7,8-HxCDF	62.5	57.3	ng/L	92	SW846 8280A
1,2,3,4,6,7,8-HpCDF	62.5	62.1	ng/L	99	SW846 8280A
OCDF	125	111	ng/L	89	SW846 8280A

<u>INTERNAL STANDARD</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
13C-2,3,7,8-TCDD	94	(25 - 150)
13C-2,3,7,8-TCDF	98	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	96	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	106	(25 - 150)
13C-OCDD	99	(25 - 150)

  

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
37Cl4-2,3,7,8-TCDD	108	(25 - 150)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters



**STL Sacramento**  
880 Riverside Parkway  
West Sacramento, CA 95605

Tel: 916 373 5600 Fax: 916 372 1059  
[www.stl-inc.com](http://www.stl-inc.com)

July 22, 2004

STL SACRAMENTO PROJECT NUMBER: G4G090356  
PO/CONTRACT: Q1123907

Randy Weidner  
Conservation Financing Corp.  
Southern California Edison  
P.O. Box 800 2244 Walnut Grove Avenue  
Rosemead, CA 91770

Dear Mr. Weidner,

This report contains the analytical results for the samples received under chain of custody by STL Sacramento on July 9, 2004. These samples are associated with your Visalia Poleyard project.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4362.

Sincerely,

A handwritten signature in black ink, appearing to read "Diana Brooks".

Diana Brooks  
Project Manager

CC: Jeff Noel - Krazan and Associates

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### **STL SACRAMENTO PROJECT NUMBER G4G090356**

Case Narrative  
STL Sacramento Quality Assurance Program  
Sample Description Information  
Chain of Custody Documentation  
WATER, 8280A, Dioxins/Furans  
Samples: 1, 2, 3, 4, 5, 6, 7, 8  
    Sample Data Sheets  
    Method Blank Reports  
    Laboratory QC Reports

## CASE NARRATIVE

STL SACRAMENTO PROJECT NUMBER G4G090356

### General Comments

The ambient temperature of your samples was recorded at 7 degrees C.

There were no other anomalies associated with this project.



### STL Sacramento Certifications/Accreditations

Certifying State	Certificate #	Certifying State	Certificate #
Alaska	UST-055	Oregon	CA 200005
Arizona	AZ0616	Pennsylvania	68-1272
Arkansas	NA	South Carolina	87014001
California*	01119CA	Utah*	QUAN1
Connecticut	PH-0691	Virginia	00178
Florida*	E87570	Washington	C087
Georgia	960	West Virginia	9930C, 334
Hawaii	NA	Wisconsin	998204680
Louisiana*	01944	NFESC	NA
Michigan	9947	USACE	NA
Nevada	CA 044	USACE	NA
New Jersey*	CA005	USDA Foreign Plant	37-82605
New York*	11666	USDA Foreign Soil	S-46613

\*NELAP accredited. A more detailed parameter list is available upon request.

### QC Parameter Definitions

**QC Batch:** The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

**Method Blank:** An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

**Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD):** An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also be used to evaluate the precision of the process.

**Duplicate Sample (DU):** Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

**Surrogates:** Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

**Matrix Spike and Matrix Spike Duplicate (MS/MSD):** An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

**Isotope Dilution:** For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD are only performed for client or QAPP requirements.

**Control Limits:** The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

## Sample Summary

### G4G090356

<u>WO#</u>	<u>Sample #</u>	<u>Client Sample ID</u>	<u>Sampling Date</u>	<u>Received Date</u>
GKR2G 1		S-15I	7/8/04 09:00 AM	7/9/04 09:20 AM
GKR2M 2		S-15D	7/8/04 09:45 AM	7/9/04 09:20 AM
GKR2Q 3		MW-25	7/8/04 10:30 AM	7/9/04 09:20 AM
GKR2R 4		MW-40	7/8/04 11:15 AM	7/9/04 09:20 AM
GKR2T 5		MW-38	7/8/04 12:00 PM	7/9/04 09:20 AM
GKR2V 6		MW-38D	7/8/04 12:00 PM	7/9/04 09:20 AM
GKR2W 7		MW-37	7/8/04 12:45 PM	7/9/04 09:20 AM
GKR2X 8		S-14I	7/8/04 02:00 PM	7/9/04 09:20 AM

#### Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight

# WATER, 8280A, Dioxins/Furans



STL # 18

## CHAIN-OF-CUSTODY RECORD

DATE: 7-8-04

PAGE 1 OF 1

KRAZAN & ASSOCIATES, INC.  
215 WEST DAKOTA AVENUE  
CLOVIS, CA 93612  
(559) 348-2200 VOICE  
(559) 348-2201 FAX

Project No.: 01401011

Sampler Name  
(Printed): Michael L. MAUZY

## Comments:

Samples received at 7°C, ice was on top of samples and was distributed evenly around samples. Ice was also melted.

Project Name  
(optional): RPTReport  
Attention: J. Noc /

Lab Sample ID #	Krazan Sample No.	Date Sampled	Time Sampled	Sample Description	Sample Matrix W=Water S=Soil A=AIR O=Other	Sample Type G=Grab C=Composite D=Discrete	Sample Preserved? (Yes/No)	Number of Containers	REQUESTED ANALYSES			P.O. Number:  Ice Chest No.: Laboratory: STL
									BTEX/TPH-Gasoline/MTBE	TPH-Diesel	TRPH by EPA 418.1	
	S-15I	7-8-04	0900	S-15I	W G	N	2	X				
	S-15D		0945	S-15D			2	X				
	MW-25		1030	MW-25			2	X				
	MW-40		1115	MW-40			2	X				
	MW-38		1200	MW-38			2	X				
	MW-38D		1200	MW-38D			2	X				
	MW-37		1245	MW-37			2	X				
	S-14I		1400	S-14I			2	X				
	Temp blank		-	Temp blank			1	X				

RECEIVED IN GOOD CONDITION  
BY [Signature]

JUL 9 2004

NI:

Signature:	Printed Name:	Date:	Start Time:	End Time:	Company Name:	Total Number of Containers Submitted to Laboratory
Relinquished by: Michael L. Mauzy	Michael L. Mauzy	7-8-04	1600 am	pm	Krazan	17
Received by: [Signature]						
Relinquished by: [Signature]						
Received by: [Signature]						
Relinquished by: [Signature]						
Received for laboratory by: [Signature]						

Turn Around Time  
(Circle Choice)

24 Hrs. 48 Hrs.

5 Days 10 Days

As Contracted

## CONSERVATION FINANCING CORP.

Dioxins/Furans, HRGC/LRMS (8280A)

## Client Sample ID: S-15I

Lot-Sample #...:	G4G090356 - 001	Work Order #...:	GKR2G1AA	Matrix....:	WATER
Date Sampled....:	07/08/04	Date Received..:	07/09/04	Instrument:	1DB
Prep Date.....:	07/13/04	Analysis Date..:	07/15/04	Units.....:	ng/L
Prep Batch #...:	4195448	Dilution Factor:	1	% Moisture:	

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	0.098	1.000	0
Total TCDD	ND	0.098		0
1,2,3,7,8-PeCDD	ND	0.20	0.500	0
Total PeCDD	ND	0.20		0
1,2,3,4,7,8-HxCDD	ND	0.14	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.30	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.26	0.100	0
Total HxCDD	ND	0.73		0
1,2,3,4,6,7,8-HpCDD	8.3	J	0.010	0.0830
Total HpCDD	29			
OCDD	83		0.001	0.0830
2,3,7,8-TCDF	ND	0.085	0.100	0
Total TCDF	ND	0.085		0
1,2,3,7,8-PeCDF	ND	0.097	0.050	0
2,3,4,7,8-PeCDF	ND	0.17	0.500	0
Total PeCDF	ND	0.17		0
1,2,3,4,7,8-HxCDF	ND	0.24	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.13	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.16	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.16	0.100	0
Total HxCDF	ND	0.32		0
1,2,3,4,6,7,8-HpCDF	ND	0.87	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.17	0.010	0
Total HpCDF	ND	2.5		0
OCDF	ND	3.2	0.001	0
Total TEQ Concentration				0.1660

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	80	25 - 150
13C-2,3,7,8-TCDF	86	25 - 150
13C-1,2,3,6,7,8-HxCDD	83	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	102	25 - 150
13C-OCDD	118	25 - 150

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	84	25 - 150

**CONSERVATION FINANCING CORP.**

**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: S-15I**

**Notes:**

TEQ values are cited in U.S. Environmental Protection Agency, (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC: EPA/605/R-89/016

J Estimated result. Result is less than the reporting limit.

**CONSERVATION FINANCING CORP.**  
**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: S-15D**

Lot-Sample #...:	G4G090356 - 002	Work Order #...:	GKR2M1AA	Matrix....:	WATER
Date Sampled...:	07/08/04	Date Received...:	07/09/04	Instrument:	1DB
Prep Date.....:	07/13/04	Analysis Date..:	07/15/04	Units....:	ng/L
Prep Batch #...:	4195448	Dilution Factor:	1	% Moisture:	

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	0.044	1.000	0
Total TCDD	ND	0.044		0
1,2,3,7,8-PeCDD	ND	0.050	0.500	0
Total PeCDD	ND	0.050		0
1,2,3,4,7,8-HxCDD	ND	0.069	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.019	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.080	0.100	0
Total HxCDD	ND	0.080		0
1,2,3,4,6,7,8-HpCDD	ND	0.21	0.010	0
Total HpCDD	ND	0.44		0
OCDD	ND	1.9	0.001	0
2,3,7,8-TCDF	ND	0.028	0.100	0
Total TCDF	ND	0.028		0
1,2,3,7,8-PeCDF	ND	0.037	0.050	0
2,3,4,7,8-PeCDF	ND	0.028	0.500	0
Total PeCDF	ND	0.073		0
1,2,3,4,7,8-HxCDF	ND	0.079	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.066	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.093	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.092	0.100	0
Total HxCDF	ND	0.10		0
1,2,3,4,6,7,8-HpCDF	ND	0.045	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.079	0.010	0
Total HpCDF	ND	0.079		0
OCDF	ND	0.19	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	75	25 - 150
13C-2,3,7,8-TCDF	79	25 - 150
13C-1,2,3,6,7,8-HxCDD	77	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	93	25 - 150
13C-OCDD	103	25 - 150

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	96	25 - 150

**CONSERVATION FINANCING CORP.**  
**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: S-15D**

**Notes:**

TEF values are cited in U.S. Environmental Protection Agency, (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC; EPA/625/R-89/016

## CONSERVATION FINANCING CORP.

Dioxins/Furans, HRGC/LRMS (8280A)

## Client Sample ID: MW-25

Lot-Sample #...:	G4G090356 - 003	Work Order #...:	GKR2Q1AA	Matrix....:	WATER
Date Sampled...:	07/08/04	Date Received...:	07/09/04	Instrument:	IDB
Prep Date.....:	07/13/04	Analysis Date..:	07/15/04	Units.....:	ng/L
Prep Batch #...:	4195448	Dilution Factor:	1	% Moisture:	

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	0.028	1.000	0
Total TCDD	ND	0.028		0
1,2,3,7,8-PeCDD	ND	0.11	0.500	0
Total PeCDD	ND	0.41		0
1,2,3,4,7,8-HxCDD	ND	0.040	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.046	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.069	0.100	0
Total HxCDD	ND	0.069		0
1,2,3,4,6,7,8-HpCDD	ND	0.075	0.010	0
Total HpCDD	ND	0.075		0
OCDD	ND	0.078	0.001	0
2,3,7,8-TCDF	ND	0.032	0.100	0
Total TCDF	ND	0.032		0
1,2,3,7,8-PeCDF	ND	0.048	0.050	0
2,3,4,7,8-PeCDF	ND	0.11	0.500	0
Total PeCDF	ND	0.12		0
1,2,3,4,7,8-HxCDF	ND	0.063	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.052	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.035	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.11	0.100	0
Total HxCDF	ND	0.12		0
1,2,3,4,6,7,8-HpCDF	ND	0.073	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.068	0.010	0
Total HpCDF	ND	0.080		0
OCDF	ND	0.063	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	92	25 - 150
13C-2,3,7,8-TCDF	89	25 - 150
13C-1,2,3,6,7,8-HxCDD	87	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	99	25 - 150
13C-OCDD	99	25 - 150
<b>SURROGATE</b>	<b>PERCENT RECOVERY</b>	<b>RECOVERY LIMITS</b>
37Cl4-2,3,7,8-TCDD	103	25 - 150

**CONSERVATION FINANCING CORP.**

**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: MW-25**

**Notes:**

TEF values are cited in U.S. Environmental Protection Agency, (1989) interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC:  
EPA/625/R-89/016

## CONSERVATION FINANCING CORP.

Dioxins/Furans, HRGC/LRMS (8280A)

## Client Sample ID: MW-40

Lot-Sample #: G4G090356 - 004  
 Date Sampled.: 07/08/04  
 Prep Date.....: 07/13/04  
 Prep Batch #: 4195448

Work Order #: GKR2R1AA  
 Date Received.: 07/09/04  
 Analysis Date.: 07/15/04  
 Dilution Factor: 1

Matrix....: WATER  
 Instrument: 1DB  
 Units....: ng/L  
 % Moisture:

<u>PARAMETER</u>	<u>RESULT</u>	<u>DETECTION LIMIT</u>	<u>TEF FACTOR</u>	<u>TEQ CONCENTRATION</u>
2,3,7,8-TCDD	ND	0.057	1.000	0
Total TCDD	ND	0.057		0
1,2,3,7,8-PeCDD	ND	0.11	0.500	0
Total PeCDD	ND	0.11		0
1,2,3,4,7,8-HxCDD	ND	0.082	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.020	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.057	0.100	0
Total HxCDD	ND	0.082		0
1,2,3,4,6,7,8-HpCDD	ND	0.076	0.010	0
Total HpCDD	ND	0.076		0
OCDD	ND	0.20	0.001	0
2,3,7,8-TCDF	ND	0.058	0.100	0
Total TCDF	ND	0.058		0
1,2,3,7,8-PeCDF	ND	0.053	0.050	0
2,3,4,7,8-PeCDF	ND	0.044	0.500	0
Total PeCDF	ND	0.11		0
1,2,3,4,7,8-HxCDF	ND	0.063	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.055	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.049	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.15	0.100	0
Total HxCDF	ND	0.15		0
1,2,3,4,6,7,8-HpCDF	ND	0.088	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.083	0.010	0
Total HpCDF	ND	0.097		0
OCDF	ND	0.051	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

<u>INTERNAL STANDARDS</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
13C-2,3,7,8-TCDD	69	25 - 150
13C-2,3,7,8-TCDF	69	25 - 150
13C-1,2,3,6,7,8-HxCDD	65	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	69	25 - 150
13C-OCDD	65	25 - 150

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
37Cl4-2,3,7,8-TCDD	99	25 - 150

**CONSERVATION FINANCING CORP.**  
**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: MW-40**

**Notes:**

TEF values are cited in U.S. Environmental Protection Agency, (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC: EPA/600/R-89/01A

**CONSERVATION FINANCING CORP.**  
**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: MW-38**

Lot-Sample #: G4G090356 - 005  
 Date Sampled.: 07/08/04  
 Prep Date.....: 07/13/04  
 Prep Batch #: 4195448

Work Order #: GKR2T1AA  
 Date Received.: 07/09/04  
 Analysis Date..: 07/15/04  
 Dilution Factor: 1

Matrix....: WATER  
 Instrument: 1DB  
 Units.....: ng/L  
 % Moisture:

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	0.058	1.000	0
Total TCDD	ND	0.058		0
1,2,3,7,8-PeCDD	ND	0.11	0.500	0
Total PeCDD	ND	0.11		0
1,2,3,4,7,8-HxCDD	ND	0.051	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.033	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.081	0.100	0
Total HxCDD	ND	0.081		0
1,2,3,4,6,7,8-HpCDD	ND	0.058	0.010	0
Total HpCDD	ND	0.058		0
OCDD	ND	0.17	0.001	0
2,3,7,8-TCDF	ND	0.030	0.100	0
Total TCDF	ND	0.030		0
1,2,3,7,8-PeCDF	ND	0.048	0.050	0
2,3,4,7,8-PeCDF	ND	0.042	0.500	0
Total PeCDF	ND	0.081		0
1,2,3,4,7,8-HxCDF	ND	0.030	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.026	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.038	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.14	0.100	0
Total HxCDF	ND	0.15		0
1,2,3,4,6,7,8-HpCDF	ND	0.052	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.069	0.010	0
Total HpCDF	ND	0.069		0
OCDF	ND	0.11	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	87	25 - 150
13C-2,3,7,8-TCDF	83	25 - 150
13C-1,2,3,6,7,8-HxCDD	82	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	97	25 - 150
13C-OCDD	104	25 - 150

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	99	25 - 150

**CONSERVATION FINANCING CORP.**

**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: MW-38**

**Notes:**

TEF values are cited in U.S. Environmental Protection Agency. (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency. Risk Assessment Forum, Washington, DC. EPA/605/R-89/016

**CONSERVATION FINANCING CORP.**  
**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: MW-38D**

Lot-Sample #...:	G4G090356 - 006	Work Order #...:	GKR2V1AA	Matrix....:	WATER
Date Sampled...:	07/08/04	Date Received..:	07/09/04	Instrument:	1DB
Prep Date.....:	07/13/04	Analysis Date..:	07/15/04	Units.....:	ng/L
Prep Batch #...:	4195448	Dilution Factor:	1	% Moisture:	

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	0.17	1.000	0
Total TCDD	ND	0.17		0
1,2,3,7,8-PeCDD	ND	0.79	0.500	0
Total PeCDD	ND	0.79		0
1,2,3,4,7,8-HxCDD	ND	0.14	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.45	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.33	0.100	0
Total HxCDD	ND	0.45		0
1,2,3,4,6,7,8-HpCDD	ND	0.41	0.010	0
Total HpCDD	ND	0.41		0
OCDD	ND	0.73	0.001	0
2,3,7,8-TCDF	ND	0.20	0.100	0
Total TCDF	ND	0.73		0
1,2,3,7,8-PeCDF	ND	0.34	0.050	0
2,3,4,7,8-PeCDF	ND	0.41	0.500	0
Total PeCDF	ND	0.49		0
1,2,3,4,7,8-HxCDF	ND	0.21	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.21	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.21	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.40	0.100	0
Total HxCDF	ND	0.47		0
1,2,3,4,6,7,8-HpCDF	ND	0.40	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.49	0.010	0
Total HpCDF	ND	0.91		0
OCDF	ND	1.3	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	85	25 - 150
13C-2,3,7,8-TCDF	89	25 - 150
13C-1,2,3,6,7,8-HxCDD	82	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	106	25 - 150
13C-OCDD	100	25 - 150

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	103	25 - 150

**CONSERVATION FINANCING CORP.**

**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: MW-38D**

**Notes:**

TEF values are cited in U.S. Environmental Protection Agency, (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC: EPA/605/R-89/01A

**CONSERVATION FINANCING CORP.**  
**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: MW-37**

Lot-Sample #....:	G4G090356 - 007	Work Order #....:	GKR2W1AA	Matrix....:	WATER
Date Sampled....:	07/08/04	Date Received..:	07/09/04	Instrument:	1DB
Prep Date.....:	07/13/04	Analysis Date..:	07/15/04	Units.....:	ng/L
Prep Batch #....:	4195448	Dilution Factor:	1	% Moisture:	

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	0.038	1.000	0
Total TCDD	ND	0.038		0
1,2,3,7,8-PeCDD	ND	0.099	0.500	0
Total PeCDD	ND	0.099		0
1,2,3,4,7,8-HxCDD	ND	0.087	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.050	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.066	0.100	0
Total HxCDD	ND	0.087		0
1,2,3,4,6,7,8-HpCDD	ND	0.090	0.010	0
Total HpCDD	ND	0.090		0
OCDD	ND	0.24	0.001	0
2,3,7,8-TCDF	ND	0.025	0.100	0
Total TCDF	ND	0.025		0
1,2,3,7,8-PeCDF	ND	0.038	0.050	0
2,3,4,7,8-PeCDF	ND	0.044	0.500	0
Total PeCDF	ND	0.090		0
1,2,3,4,7,8-HxCDF	ND	0.045	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.037	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.047	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.10	0.100	0
Total HxCDF	ND	0.12		0
1,2,3,4,6,7,8-HpCDF	ND	0.065	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.070	0.010	0
Total HpCDF	ND	0.072		0
OCDF	ND	0.029	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVFRY LIMITS
13C-2,3,7,8-TCDD	78	25 - 150
13C-2,3,7,8-TCDF	77	25 - 150
13C-1,2,3,6,7,8-HxCDD	72	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	83	25 - 150
13C-OCDD	88	25 - 150
SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	104	25 - 150

**CONSERVATION FINANCING CORP.**

**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: MW-37**

**Notes:**

TEQ values are cited in U.S. Environmental Protection Agency. (1989) Interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency. Risk Assessment forum. Washington, DC: EPA/600/R-89/016

## CONSERVATION FINANCING CORP.

Dioxins/Furans, HRGC/LRMS (8280A)

## Client Sample ID: S-14I

Lot-Sample #...:	G4G090356 - 008	Work Order #...:	GKR2X1AA	Matrix....:	WATER
Date Sampled...:	07/08/04	Date Received..:	07/09/04	Instrument:	1DB
Prep Date.....:	07/13/04	Analysis Date..:	07/15/04	Units.....:	ng/L
Prep Batch #...:	4195448	Dilution Factor:	1	% Moisture:	

PARAMETER	RESULT	DETECTION LIMIT	TEF FACTOR	TEQ CONCENTRATION
2,3,7,8-TCDD	ND	0.036	1.000	0
Total TCDD	ND	0.036		0
1,2,3,7,8-PeCDD	ND	0.077	0.500	0
Total PeCDD	ND	0.077		0
1,2,3,4,7,8-HxCDD	ND	0.019	0.100	0
1,2,3,6,7,8-HxCDD	ND	0.040	0.100	0
1,2,3,7,8,9-HxCDD	ND	0.055	0.100	0
Total HxCDD	ND	0.055		0
1,2,3,4,6,7,8-HpCDD	ND	0.67	0.010	0
Total HpCDD	ND	1.0		0
OCDD	ND	4.0	0.001	0
2,3,7,8-TCDF	ND	0.024	0.100	0
Total TCDF	ND	0.024		0
1,2,3,7,8-PeCDF	ND	0.035	0.050	0
2,3,4,7,8-PeCDF	ND	0.027	0.500	0
Total PeCDF	ND	0.081		0
1,2,3,4,7,8-HxCDF	ND	0.027	0.100	0
1,2,3,6,7,8-HxCDF	ND	0.020	0.100	0
2,3,4,6,7,8-HxCDF	ND	0.040	0.100	0
1,2,3,7,8,9-HxCDF	ND	0.097	0.100	0
Total HxCDF	ND	0.11		0
1,2,3,4,6,7,8-HpCDF	ND	0.067	0.010	0
1,2,3,4,7,8,9-HpCDF	ND	0.055	0.010	0
Total HpCDF	ND	0.16		0
OCDF	ND	0.040	0.001	0
<b>Total TEQ Concentration</b>				<b>0</b>

INTERNAL STANDARDS	PERCENT RECOVERY	RECOVERY LIMITS
13C-2,3,7,8-TCDD	87	25 - 150
13C-2,3,7,8-TCDF	87	25 - 150
13C-1,2,3,6,7,8-HxCDD	85	25 - 150
13C-1,2,3,4,6,7,8-HpCDF	96	25 - 150
13C-OCDD	102	25 - 150

SURROGATE	PERCENT RECOVERY	RECOVERY LIMITS
37Cl4-2,3,7,8-TCDD	101	25 - 150

**CONSERVATION FINANCING CORP.**  
**Dioxins/Furans, HRGC/LRMS (8280A)**

**Client Sample ID: S-14I**

**Notes:**

TEF values are cited in U.S. Environmental Protection Agency, (1989) interim procedures for estimating risks associated with exposures to mixtures of chlorinated dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 update. U.S. Environmental Protection Agency, Risk Assessment forum, Washington, DC; EPA/625/R-89/016

## QC DATA ASSOCIATION SUMMARY

G4G090356

### Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	WATER	SW846 8280A		4195448	
002	WATER	SW846 8280A		4195448	
003	WATER	SW846 8280A		4195448	
004	WATER	SW846 8280A		4195448	
005	WATER	SW846 8280A		4195448	
006	WATER	SW846 8280A		4195448	
007	WATER	SW846 8280A		4195448	
008	WATER	SW846 8280A		4195448	

**METHOD BLANK REPORT**

**Trace Level Organic Compounds**

Client Lot #....: G4G090356  
MB Lot-Sample #: G4G130000-448

Work Order #....: GK1P61AA  
Prep Date.....: 07/13/04

Matrix.....: WATER

Analysis Date...: 07/15/04  
Dilution Factor: 1

Prep Batch #....: 4195448

<u>PARAMETER</u>	<u>RESULT</u>	DETECTION		
		<u>LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>
2,3,7,8-TCDD	ND	0.052	ng/L	SW846 8280A
Total TCDD	ND	0.052	ng/L	SW846 8280A
1,2,3,7,8-PeCDD	ND	0.080	ng/L	SW846 8280A
Total PeCDD	ND	0.080	ng/L	SW846 8280A
1,2,3,4,7,8-HxCDD	ND	0.044	ng/L	SW846 8280A
1,2,3,6,7,8-HxCDD	ND	0.025	ng/L	SW846 8280A
1,2,3,7,8,9-HxCDD	ND	0.025	ng/L	SW846 8280A
Total HxCDD	ND	0.044	ng/L	SW846 8280A
1,2,3,4,6,7,8-HpCDD	ND	0.090	ng/L	SW846 8280A
Total HpCDD	ND	0.090	ng/L	SW846 8280A
OCDD	ND	0.11	ng/L	SW846 8280A
2,3,7,8-TCDF	ND	0.035	ng/L	SW846 8280A
Total TCDF	ND	0.035	ng/L	SW846 8280A
1,2,3,7,8-PeCDF	ND	0.048	ng/L	SW846 8280A
2,3,4,7,8-PeCDF	ND	0.062	ng/L	SW846 8280A
Total PeCDF	ND	0.074	ng/L	SW846 8280A
1,2,3,4,7,8-HxCDF	ND	0.064	ng/L	SW846 8280A
1,2,3,6,7,8-HxCDF	ND	0.054	ng/L	SW846 8280A
2,3,4,6,7,8-HxCDF	ND	0.056	ng/L	SW846 8280A
1,2,3,7,8,9-HxCDF	ND	0.077	ng/L	SW846 8280A
Total HxCDF	ND	0.089	ng/L	SW846 8280A
1,2,3,4,6,7,8-HpCDF	ND	0.076	ng/L	SW846 8280A
1,2,3,4,7,8,9-HpCDF	ND	0.063	ng/L	SW846 8280A
Total HpCDF	ND	0.13	ng/L	SW846 8280A
OCDF	ND	0.19	ng/L	SW846 8280A

<u>INTERNAL STANDARDS</u>	<u>PERCENT RECOVERY</u>	RECOVERY
		LIMITS
13C-2,3,7,8-TCDD	76	(25 - 150)
13C-2,3,7,8-TCDF	78	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	81	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	98	(25 - 150)
13C-OCDD	110	(25 - 150)

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	RECOVERY
		LIMITS
37Cl4-2,3,7,8-TCDD	92	(25 - 150)

**NOTE(S) :**

Calculations are performed before rounding to avoid round-off errors in calculated results.

## LABORATORY CONTROL SAMPLE EVALUATION REPORT

## Trace Level Organic Compounds

Client Lot #....: G4G090356      Work Order #....: GK1P61AC      Matrix.....: WATER  
 LCS Lot-Sample#: G4G130000-448  
 Prep Date.....: 07/13/04      Analysis Date..: 07/15/04  
 Prep Batch #....: 4195448  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>
2,3,7,8-TCDD	110	(67 - 127)	SW846 8280A
1,2,3,7,8-PeCDD	113	(66 - 140)	SW846 8280A
1,2,3,6,7,8-HxCDD	105	(73 - 126)	SW846 8280A
1,2,3,4,6,7,8-HpCDD	117	(70 - 129)	SW846 8280A
OCDD	96	(58 - 118)	SW846 8280A
2,3,7,8-TCDF	91	(21 - 129)	SW846 8280A
1,2,3,7,8-PeCDF	105	(70 - 144)	SW846 8280A
1,2,3,6,7,8-HxCDF	90	(67 - 125)	SW846 8280A
1,2,3,4,6,7,8-HpCDF	103	(68 - 123)	SW846 8280A
OCDF	84	(59 - 119)	SW846 8280A

<u>INTERNAL STANDARD</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
13C-2,3,7,8-TCDD	74	(25 - 150)
13C-2,3,7,8-TCDF	78	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	80	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	93	(25 - 150)
13C-OCDD	106	(25 - 150)

<u>SURROGATE</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>
37C14-2,3,7,8-TCDD	93	(25 - 150)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters

## LABORATORY CONTROL SAMPLE DATA REPORT

## Trace Level Organic Compounds

Client Lot #....: G4G090356      Work Order #....: GK1P61AC      Matrix.....: WATER  
 LCS Lot-Sample#: G4G130000-448  
 Prep Date.....: 07/13/04      Analysis Date..: 07/15/04  
 Prep Batch #....: 4195448  
 Dilution Factor: 1

<u>PARAMETER</u>	<u>SPIKE</u>	<u>MEASURED</u>	<u>UNITS</u>	<u>PERCENT</u>	<u>METHOD</u>
	<u>AMOUNT</u>	<u>AMOUNT</u>		<u>RECOVERY</u>	
2,3,7,8-TCDD	25.0	27.4	ng/L	110	SW846 8280A
1,2,3,7,8-PeCDD	62.5	70.5	ng/L	113	SW846 8280A
1,2,3,6,7,8-HxCDD	62.5	65.7	ng/L	105	SW846 8280A
1,2,3,4,6,7,8-HpCDD	62.5	72.9	ng/L	117	SW846 8280A
OCDD	125	120	ng/L	96	SW846 8280A
2,3,7,8-TCDF	25.0	22.8	ng/L	91	SW846 8280A
1,2,3,7,8-PeCDF	62.5	65.9	ng/L	105	SW846 8280A
1,2,3,6,7,8-HxCDF	62.5	56.4	ng/L	90	SW846 8280A
1,2,3,4,6,7,8-HpCDF	62.5	64.5	ng/L	103	SW846 8280A
OCDF	125	105	ng/L	84	SW846 8280A

<u>INTERNAL STANDARD</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
13C-2,3,7,8-TCDD	74	(25 - 150)
13C-2,3,7,8-TCDF	78	(25 - 150)
13C-1,2,3,6,7,8-HxCDD	80	(25 - 150)
13C-1,2,3,4,6,7,8-HpCDF	93	(25 - 150)
13C-OCDD	106	(25 - 150)

<u>SURROGATE</u>	<u>PERCENT</u>	<u>RECOVERY</u>
	<u>RECOVERY</u>	<u>LIMITS</u>
37Cl4-2,3,7,8-TCDD	93	(25 - 150)

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

Bold print denotes control parameters